

and a plurality of DTV transmitters, the pseudo-ranges calculated from broadcast DTV signals received by the device from the DTV transmitters; and

means for providing navigation information according to the location of the device.

14. The apparatus of claim 13, wherein the navigation information comprises a map of a local vicinity around the device.

15. The apparatus of claim 13, wherein the navigation information comprises directions between the location of the device and a second location.

16. The apparatus of claim 15, wherein the second location is determined by a user of the device.

17. The apparatus of claim 13, further comprising:

means for periodically accessing an updated location of the device; and

means for periodically providing updated navigation information according to the updated location.

18. The apparatus of claim 13 wherein the DTV signals are American Television Standards Committee (ATSC) signals.

19. The apparatus of claim 13 wherein the DTV signals are European Telecommunications Standards Institute Digital Video Broadcasting-Terrestrial (DVB-T) signals.

20. The apparatus of claim 13 wherein the DTV signals are Japanese Integrated Service Digital Broadcasting-Terrestrial (ISDB-T) signals.

21. The apparatus of claim 13 wherein the device is positioned on a vehicle.

22. The apparatus of claim 21 wherein the vehicle is an automobile or a truck.

23. The apparatus of claim 13 wherein the device is positioned on a mobile electronic device.

24. The apparatus of claim 23 wherein the mobile electronic device is a mobile phone.

25. The apparatus of claim 23 wherein the mobile electronic device is a personal digital assistant.

26. A computer software product, comprising instructions stored on a computer readable medium, to effect a method comprising:

accessing a location of the device, the location determined from pseudo-ranges between the device and a plurality of DTV transmitters, the pseudo-ranges calculated

from broadcast DTV signals received by the device from the DTV transmitters; and

providing navigation information according to the location of the device.

27. The computer software product of claim 26, wherein the navigation information comprises a map of a local vicinity around the device.

28. The computer software product of claim 26, wherein the navigation information comprises directions between the location of the device and a second location.

29. The computer software product of claim 28, wherein the second location is determined by a user of the device.

30. The computer software product of claim 25, the effected method further comprising:

periodically accessing an updated location of the device; and

periodically providing updated navigation information according to the updated location.

31. A system for providing a navigation service based on a location of a device, the system comprising:

a device for receiving broadcast DTV signals from a plurality of DTV transmitters;

a DTV location server for determining a location of the device from pseudo-ranges between the device and the DTV transmitters, the pseudo-ranges calculated from the received DTV signals; and

a service provider system for providing navigation information according to the location of the device.

32. The system of claim 31 wherein the device serves as the service provider system by providing the navigation information.

33. The system of claim 31 wherein:

the device serves as the DTV location server by determining the location from the pseudo-ranges; and

the device serves as the service provider system by providing the navigation information.

34. The system of claim 31 wherein:

the device serves as the DTV location server by determining the location from the pseudo-ranges.

\* \* \* \* \*